

**UNITED STATES DEPARTMENT OF COMMERCE****United States Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

GG

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/425,302 10/25/99 TOMOYUKI

N 501.34746CX1

020457 TM02/0917
ANTONELLI TERRY STOUT AND KRAUS
SUITE 1800
1300 NORTH SEVENTEENTH STREET
ARLINGTON VA 22209

EXAMINER

AKERS, G

ART UNIT

PAPER NUMBER

2164

DATE MAILED:

09/17/01

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/425,302

Applicant(s)
Tomoyuki

Examiner
Geoffrey Akers

Art Unit
2164



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Aug 31, 2001
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final. *(The Final Rejection of 7/14/01 has been withdrawn)*
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle* 35 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10 and 19-38 is/are pending in the application
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10 and 19-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirements

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) ☐ Other: _____

Art Unit: 2164

JS

~~SUPPLEMENTAL DETAILED ACTION~~

Response to Request and Amendment

1. The text of those sections of Title 35 US Code not included herein can be found in a prior Office action(see Serial No: 09/425,302). The text of those sections of Title 35 US Code not otherwise provided in a prior Office action will be included here where appropriate.
2. This action is responsive to the request filed 8/31/01 and applicant's Amendment C(Paper #9).
3. New claims 36-38 have been added. No further claims were deleted. None were amended.
4. Claims 10 and 19-38 are pending.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 25,27,29-31,36-37 are rejected under 35 USC 103(a) as unpatentable over Halpern(US Pat. No: 4,906,828) and further in view of Takeuchi(US Pat. No: 4,963,722).
7. As per claim 25 Halpern teaches an IC card used in an electronic purse loan system, comprising a balance memory which stores electronic data representing a money balance(col 14 lines 6-17). Takeuchi teaches an (overdraft) loan memory which stores electronic data of a loan and a processor which writes electronic data of a loan into said loan memory when said electronic data representing a money balance is less than the amount of money required for a transaction(col

Art Unit: 2164

3 lines 4-49)(col 3 line 65-col 4 line 2). Halpern teaches changing balances in debiting and crediting operations(col 14 lines 6-17). These crediting operations may represent loans being made to an account and debiting operations loan payments being deducted from the account. It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Takeuchi to teach the above to the lending operation. The motivation for this is to describe a loan transaction process for implementation on IC cards which permits the storage of excess spending(overdrafts) and equivalently, loans.

8. As per claim 27 Halpern teaches an IC card according to claim 25, further comprising: a connector which inputs/outputs electric money data from/to an external terminal in said electric purse loan system(Fig. 10)(col 10 lines 19-53). It would have been obvious to one skilled in the art at the time of the invention to apply these techniques taught by Halpern to combine Halpern in view of Takeuchi to teach the above to the lending operation. The motivation for this is to describe a loan transaction process for implementation on IC cards which permits the storage of excess spending(overdrafts) and equivalently, loans.

9. As per claim 29 Halpern teaches an IC card according to claim 25, wherein said transaction is includes debiting transactions(col 3 line 9-12). Halpern fails to teach specifically that these operations are a train fare or a bus fare. It would have been obvious to one skilled in the art at the time of the invention to teach that these debiting operations are applied to train or bus fare transactions. The motivation is to use the card to transfer electronic cash to pay fares.

Art Unit: 2164

Furthermore, it would also have been obvious to one skilled in the art at the time of the invention to to combine Halpern in view of Takeuchi to teach the above to the lending operation. The motivation for this is to describe a loan transaction process for implementation on IC cards which permits the storage of excess spending(overdrafts) and equivalently, loans.

10. As per claim 30 Halpern teaches an IC card according to claim 25, wherein said electronic data of a loan includes electronic money information representing the upper limit of a loan(col 13 lines 14-30)(Fig 11). Takeuchi also teaches this (col 3 lines 4-49). It would have been obvious to one skilled in the art at the time of the invention to apply these techniques taught by Halpern to the lending operation. The motivation for this is to describe a loan transaction process for implementation on IC cards. It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Takeuchi to teach the above to the lending operation. The motivation for this is to describe a loan transaction process for implementation on IC cards which permits the storage of excess spending(overdrafts) and equivalently, loans.

11. As per claim 31 Halpern teaches an IC card according to claim 25, wherein said electronic data of a loan includes electronic money information representing the upper limit of a loan(col 13 lines 14-30)(Fig 11). Takeuchi also teaches this (col 3 lines 4-49). Halpern fails to teach that the data of a loan includes information representing the term limit of a loan. It would have been obvious to one skilled in the art at the time of the invention that if the term of the loan exceeds an upper limit an aggregate amount of money will be expended in excess of a threshold as taught into Fig11. It would also have been obvious to one skilled in the art at the time of the invention to

Art Unit: 2164

combine Halpern in view of Takeuchi to teach the above to the lending operation. The motivation for this is to describe a loan transaction process for implementation on IC cards which permits the storage of excess spending (overdrafts) and equivalently, loans and to use the card to transfer electronic cash to pay fares.

12. (NEW) As per claim 36 Halpern teaches an IC card used in an electronic purse loan system, comprising a balance memory which stores electronic data representing a money balance (col 14 lines 6-17). Takeuchi teaches a loan memory which stores electronic data of a loan and a processor which writes electronic data of a loan into said loan memory when said electronic data representing a money balance is less than the amount of money required for a transaction (col 3 lines 4-49) (col 3 line 65-col 4 line 2). Halpern teaches changing balances in debiting and crediting operations (col 14 lines 6-17). These crediting operations may represent loans being made to an account and debiting operations loan payments being deducted from the account. It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Takeuchi to teach the above to the lending operation. The motivation for this is to describe a loan transaction process for implementation on IC cards which permits the storage of excess spending (overdrafts) and equivalently, loans.

13. (NEW) As per claim 37 Halpern teaches an IC card according to claim 36, further comprising wherein electronic data representing money is input from and output from/to an external terminal to a data input/output circuit in an IC card (Fig. 10) (col 10 lines 19-53). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of

Art Unit: 2164

Takeuchi to teach the above to the lending operation. The motivation for this is to describe a loan transaction process for implementation on IC cards which permits the storage of excess spending(overdrafts) and equivalently, loans.

14. Claims 10, 19-21, 23-24, 28, 32-35 are rejected under 35 USC 103(a) as unpatentable over Halpern(US Pat. No: 4,906,828) in view of Nagata(US Pat. No: 5,140,517) and further in view of Takeuchi(US Pat. No: 4,963,722).

15. (Twice Amended) As per claim 10 Halpern teaches an electronic purse loan device(col 1 line 33-col 2 line 2) using [system, comprising:] an IC card [provided with] having a balance information storage which stores [for storing an ID number and] electronic money information(col 1 lines 48-51) representing [including the amount of a balance[;]. Takeuchi teaches a loan information storage which stores information representing loan [a terminal](col 3 lines 4-49)(col 3 line 65-col 4 line 2). Halpern teaches an IC card [reading/writing means for reading] reader/writer which reads information stored in said IC card(Fig 2) and [writing] writes information to said IC card(Fig 5)[input means for inputting a numeric value and other information personal information storage means for storing the ID numbers of IC cards in correspondence with information of balance(col 3 lines 19-23). Takeuchi teaches a loan information storage which stores information representing loan [a terminal](col 3 lines 4-49). Nagata teaches correlation means for correlating the ID number of said IC card with the ID numbers stored in said personal information storage means(Fig 7/526/527/525) to access the information of a loan amount stored in said personal

Art Unit: 2164

information storage means]; [wherein] and a processor which, when [a payment for] a commercial transaction is made, [said terminal] subtracts an amount(Fig. 8B/554) [equivalent to the amount] of money to be paid for said commercial transaction from [the amount of the] said balance [stored in said IC card using said IC card reading/writing means] information storage: wherein said IC card reader/writer writes information representing a loan into said loan information storage(Fig 8B/555) when said electronic money information representing a balance is less than said amount of money to be paid for the commercial transaction(Fig 8B/560/561/562)(Fig 12).It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata and further in view of Takeuchi to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

16. As per claim 19 Halpern teaches an electronic purse loan device according to claim 10, wherein said processor checks whether or not said IC card is registered(col 3 line 59-col 4 line 2)(col 10 lines 49-54).It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata and further in view of Takeuchi to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

17. As per claim 20 Halpern teaches an electronic purse device according to claim 10. Takeuchi teaches wherein said processor checks said information representing a loan stored in said IC card and inhibits the commercial transaction if the amount of money to be paid for it is greater than a predetermined amount of money(col 3 lines 4-49)(col 3 line 65-col 4 line 2).It would have been

Art Unit: 2164

obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata and further in view of Takeuchi to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

18. As per claim 21 Halpern teaches an electronic purse device according to claim 10. Takeuchi teaches wherein said processor checks said information representing a loan stored in said IC card and inhibits a loan if the amount of money to be paid is greater than a predetermined amount of money(col 3 lines 4-49)(col 3 line 65-col 4 line 2). Halpern fails to teach that the term of the loan is greater than a predetermined term. It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata and further in view of Takeuchi to teach that if the term of the loan is greater than a predetermined period, the loan is inhibited, since an amount of money in excess of a threshold is reached as taught in Fig 11. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

19. As per claim 23 Nagata teaches an electronic purse loan device according to claim 10, wherein said processor liquidates a loan when the next commercial transaction occurs(col 9 lines 39-58)(Fig. 8B/S55/S56). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata and further in view of Takeuchi to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

Art Unit: 2164

20. As per claim 24 Halpern teaches an electronic purse device according to claim 10. Takeuchi teaches a device further comprising a display which displays information indicating that said electronic money information representing a balance is less than said amount of money to be paid for said commercial transaction (Fig 2) (col 3 lines 4-49) (col 3 line 65-col 4 line 2). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

21. As per claim 28 Halpern teaches an IC card according to claim 25, further comprising: register information as card serial number and operations data for a person (col 3 line 59-col 4 line 9). Nagata teaches an ID number memory which stores the ID number registered for a person (col 6 lines 13-25). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata and further in view of Takeuchi to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

22. As per claim 32 Halpern teaches an electronic purse system (col 1 line 33-col 2 line 2) using an IC card having a balance information storage which stores electronic information representing a money balance (col 1 lines 48-51). Takeuchi teaches a loan information storage which stores information representing a loan (col 3 lines 4-49). Halpern teaches a system comprising: (a) a terminal (col 1 lines 52-53) (col 1 line 66-col 2 line 2) an IC card reader/writer which reads information stored in said IC card and writes information to said IC card (Fig 5). Nagata teaches a

Art Unit: 2164

processor which, when a commercial transaction is made, subtracts an amount of money(Fig 8B/554) to be paid for said commercial transaction from said balance information storage.

Takeuchi teaches a center having a storage which stores money information and loan information transmitted from said terminal, wherein said terminal writes electronic information of a loan into said loan information storage and transmits loan information corresponding to said loan to said center when said electronic information representing a money balance is less than the amount of money to be paid for said commercial transaction(col 3 lines 4-49)(col 3 line 65-col 4 line 2).It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata and further in view of Takeuchi to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

23. As per claim 33 Nagata teaches an electronic purse loan device according to claim 32, wherein said processor liquidates a loan when the next commercial transaction occurs(col 9 lines 39-58)(Fig. 8B/S55/S56). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata and further in view of Takeuchi to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

24. As per claim 34 Halpern teaches an electronic purse system according to claim 32, wherein said electronic data of funds including electronic money information on the upper limit (col 13 lines 14-30)(Fig. 11). Takeuchi teaches an overdraft(loan) mechanism(col 3 lines 4-49)(col 3 line 65-col 4 line 2). Halpern fails to teach further comprising a center processor in said center,

Art Unit: 2164

wherein said center processor checks date information relating to a loan and approves the loan when said date information is within a predetermined term. It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata and further in view of Takeuchi to determining an upper limit on the term of a loan equivalent to a ceiling on expenditures stored in the card. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

25. As per claim 35 Halpern teaches an electronic purse loan system according to claim 32 further comprising a center processor in said center, wherein said center processor checks said information representing a loan and approves a loan when said information is within a predetermined upper limit (col 13 lines 14-30) (Fig 11). It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata and further in view of Takeuchi to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions used to make loans.

26. Claims 22, 26 is rejected under 35 USC 103(a) as unpatentable over Halpern (US Pat. No: 4,906,828) in view of Nagata (US Pat. No: 5,140,517) and further in view of Gaumet (US Pat. No: 5,640,306).

27. As per claim 22 Nagata teaches an electronic purse loan device according to claim 10, wherein said IC card reader/writer reads from/writes to the information stored in said IC card (Fig. 5/15/10/1/14/24) (col 7 line 63-col 8 line 64). Nagata fails to teach without contacting said IC card.

Art Unit: 2164

Gaumet teaches reading/writing information in an IC card without contact(col 1 line 1-col 2 line 6).It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Nagata and further in view of Gaumet to teach the above. The motivation for this is to describe an electronic purse employed for electronic funds deductions employed without contacting the IC card.

28. As per claim 26 Halpern teaches an IC card according to claim 25, further comprising: a data input/output circuit which inputs/outputs electronic data representing money from/to an external terminal in an electric purse loan system(Fig 2). Halpern fails to teach I/O communication with the IC card without contact. Gaumet teaches reading/writing information in an IC card without contact(Abstract)(col 1 line 1-col 2 line 6).It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Gaumet to teach the above. The motivation for this is to describe an electronic purse employed employed without contacting the IC card.

29. Claim 38 is rejected under 35 USC 103(a) as unpatentable over Halpern(US Pat. No: 4,906,828) and further in view of Gaumet(US Pat. No: 5,640,306).

30. (NEW)As per claim 38 Halpern teaches an IC card according to claim 36, further comprising: a data input/output circuit which inputs/outputs electronic data representing money from/to an external terminal in an electric purse loan system(Fig 2). Halpern fails to teach I/O communication with the IC card without contact. Gaumet teaches reading/writing information in an IC card

Art Unit: 2164

without contact(Abstract)(col 1 line 1-col 2 line 6).It would have been obvious to one skilled in the art at the time of the invention to combine Halpern in view of Gaumet to teach the above. The motivation for this is to describe an electronic purse employed utilizing I/O communication with the IC card without contact.

Response to Arguments

31. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

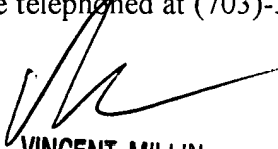
Conclusion

32. **THIS ACTION IS MADE NON-FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Comments regarding this communication should be addressed to the examiner, Dr. Geoffrey Akers, P.E. who can be reached at (703)-306-5844 between the hours of 6:30 AM and 5:00 PM Monday through Friday. If attempts to contact the examiner are unsuccessful, the examiner's supervisor, Mr. Vincent Millin, may be telephoned at (703)-308-1065.

GRA

September 12, 2001


VINCENT MILLIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100